

## REMARKS

In response to the Office Action dated January 27, 2007, claims 1, 18, and 31 have been amended. Therefore, claims 1-23 and 25-34 remain in the case. In light of the amendments and arguments set forth herein, reexamination and reconsideration of the application are requested.

### Nonstatutory Double Patenting Rejections

The Office Action rejected claims 1-23 and 25-34 under the judicially-created doctrine of obviousness-type double patenting as being unpatentable over claims 1-26 of U.S. Patent No. 6,937,266. The Office Action stated that, although the conflicting claims are not identical, they are not patentably distinct from each other.

A timely filed Terminal Disclaimer in compliance with 37 C.F.R. 1.321(c) may be used to overcome an actual rejection based on a nonstatutory double patenting ground provided that the conflicting patent is commonly owned with the application.

In the subject case, the Applicants have attached a Terminal Disclaimer that the Applicants believe overcomes the rejection of claims 1-23 and 25-34 under the judicially-created doctrine of obviousness-type double patenting as being unpatentable over claims 1-26 of U.S. Patent No. 6,937,266.

The Applicants believe that the attached Terminal Disclaimer places the application in condition for immediate allowance. Accordingly, the Examiner is respectfully requested to pass this subject application to issue.

### Section 103(a) Rejections

The Office Action rejected claims 1-23 and 25-34 under 35 U.S.C. § 103(a) as being unpatentable over a paper by Michael H. Bianchi entitled "A Fully Automatic Multi-Camera System to Teleview Auditorium Presentations" in view of a paper by Li-wei He et al. entitled "The Virtual Cinematographer: A Paradigm for Automatic Real-Time Camera Control and Directing". More specifically, the Office Action maintained that the

combination of Bianchi and He et al. discloses each and every feature of the Applicants' invention, either explicitly or implicitly.

In response, the Applicants respectfully traverse these rejections. In general, the Applicants submit that the combination of Bianchi and He et al. is lacking at least one element of the Applicants' claimed invention. More specifically, the combination does not disclose, either explicitly or implicitly, the material claimed feature of a camera system that provides multiple camera views of a lecture in a real-world lecture environment. Further, Bianchi and He et al. fail to appreciate the advantages of this claimed feature. In addition, there is no technical suggestion or motivation disclosed in either Bianchi or He et al. to define this claimed feature. Thus, the Applicants submit that the combination of Bianchi and He et al. cannot make obvious the Applicants' claimed features listed above.

To make a prima facie showing of obviousness, all of the claimed features of an Applicant's invention must be considered, especially when they are missing from the prior art. If a claimed feature is not disclosed in the prior art and has advantages not appreciated by the prior art, then no prima facie showing of obviousness has been made. The Federal Circuit Court has held that it was an error not to distinguish claims over a combination of prior art references where a material limitation in the claimed system and its purpose was not taught therein. *In re Fine*, 837 F.2d 1071, 5 USPQ2d 1596 (Fed. Cir. 1988). Moreover, as stated in the MPEP, if a prior art reference does not disclose, suggest or provide any motivation for at least one claimed feature of an Applicant's invention, then a prima facie case of obviousness has not been established (MPEP § 2142).

Amended independent claim 1 of the Applicants' claimed invention includes an automated video production system for online publishing of a lecture. The system includes a camera system that provides multiple camera views of the lecture in a real-world lecture environment, a virtual director that uses probabilistic rules to select a current camera view from the multiple camera views and is capable of changing the current camera view by switching between the multiple camera views in response to a triggering

event, and a set of expert video production rules that is applied by the virtual director to select the current camera view.

Amended independent claim 18 of the Applicants' claimed invention includes a method for automatically producing a video of a lecture for online publishing. The method includes providing a set of expert video production rules, capturing the lecture in a real-world lecture environment using a camera system that includes multiple camera views, and using the set of expert video production rules to determine a current camera view from the multiple camera views, when the current camera view should change, and to which of the multiple camera views the current camera view should change based on a probabilistic approach that uses a probabilistic transition matrix constricted by the expert video production rules such that a next current camera view is a weighted random choice.

Amended independent claim 31 of the Applicants' claimed invention includes an automated video production system for capturing images of a real-world scene. The system includes an audience-tracking camera that provides images of an audience within the real-world scene, a lecturer-tracking camera that non-intrusively tracks a lecturer within the real-world scene, and a set of expert video production rules containing video production constraints. The system further includes a virtual director module that receives multiple camera views from the audience-tracking camera and the lecturer-tracking camera and use the set of expert video production rules and probabilistic rules to select a current camera view from the multiple camera views in a real-world environment such that the current camera view is a weighted random choice.

The Applicants' claimed invention is designed to operate in a real-world environment. The system and method are intended to capture a live lecture for immediate broadcast or viewing at a later time. However, the capture of the lecture is in a real-world environment.

In contrast, He et al. disclose a hierarchical structure that simulates a virtual cinematographer in a virtual graphics environment, or "virtual 3D environments" (He et al.,

page 1, left column, Abstract, line 1-3). As compared with the system in He et al., the Applicants' claimed invention has many physical constraints that on the way cameras can be manipulated. For example, it is not possible in the Applicants' claimed system and method to obtain a shot from an arbitrary angle. Moreover, while He et al. can assume that all their cameras are available at all times in the virtual environment, the Applicants' claimed system and method cannot have that assumption because targets may not be in the field-of-view of some cameras.

He et al. also fail to appreciate or recognize the advantages of the Applicants' claimed feature. In particular, providing multiple camera views of a lecture in a real-world lecture environment allows capture of live lectures that include live lecturers and audience members.

The Applicants, therefore, submit that obviousness cannot be established since the combination of Bianchi and He et al. fail to teach, disclose, suggest or provide any motivation for the Applicants' claimed feature of providing multiple camera views of a lecture in a real-world lecture environment. In addition to explicitly lacking this feature, the combination also fail to implicitly disclose, suggest, or provide motivation for this feature. Further, the combination fails to appreciate advantages of this claimed feature.

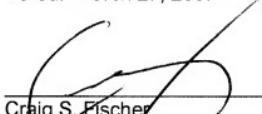
Therefore, as set forth in *In re Fine* and MPEP § 2142, the combination of Bianchi and He et al. cannot render the Applicants' claimed invention obvious because the references are missing at least one material feature of the Applicants' claimed invention discussed above. Consequently, because a *prima facie* case of obviousness cannot be established due to the lack of "some teaching, suggestion, or incentive supporting the combination", the rejection must be withdrawn. ACS Hospital Systems, Inc. v. Montefiore Hospital, 732 F.2d 1572, 1577, 221 USPQ 929, 933 (Fed. Cir. 1984); MPEP 2143.01.

Accordingly, the Applicants respectfully submit that amended independent claims 1, 18, 31 are patentable under 35 U.S.C. § 103(a) over Bianchi in view of He et al. based on

the amendments to claims 1, 18, and 31 and legal and technical arguments set forth above and below. Moreover, claims 2-17 depend from amended independent claim 1, claims 19-23 and 25-30 depend from amended independent claim 18, and claims 32-34 depend from amended independent claim 31, and are also nonobvious over Bianchi in view of He et al. (MPEP § 2143.03). The Applicants, therefore, respectfully request reexamination, reconsideration and withdrawal of the rejection of claims 1-23 and 25-34.

In an effort to expedite and further the prosecution of the subject application, the Applicants kindly invite the Examiner to telephone the Applicants' attorney at (805) 278-8855 if the Examiner has any comments, questions or concerns, wishes to discuss any aspect of the prosecution of this application, or desires any degree of clarification of this response.

Respectfully submitted,  
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